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## ↑ INDEX TERMS

**Primary Classification:****D.** Software↳ **D.3** PROGRAMMING LANGUAGES**Additional Classification:****D.** Software↳ **D.1** PROGRAMMING TECHNIQUES**F.** Theory of Computation↳ **F.3** LOGICS AND MEANINGS OF PROGRAMS**General Terms:**

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### ↑ ABSTRACT

The constrained expression approach to analysis of concurrent software systems can be used with a variety of design and programming languages and does not require a complete enumeration of the set of reachable states of the concurrent system. The construction of a toolset automating the main constrained expression analysis techniques and the results of experiments with that toolset are reported. The toolset is capable of carrying out completely automated analyses of a variety of concurrent systems, starting from source code in an Ada-like design language and producing system traces displaying the properties represented by the analysts queries. The strengths and weaknesses of the toolset and the approach are assessed on both theoretical and empirical grounds.

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## ↑ INDEX TERMS

### Primary Classification:

D. Software

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### Additional Classification:

D. Software

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↳ D.3 PROGRAMMING LANGUAGES

↳ D.3.2 Language Classifications

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210	....Silence decision	257	....Natural language
211	..Time	258	.Synthesis
212	...Pulse code modulation (PCM)	259	..Neural network
213	...Zero crossing	260	..Image to speech
214	...Voiced or unvoiced	261	..Vocal tract model
215	...Silence decision	262	..Linear prediction
216	...Correlation function	263	..Correlation
217	....Autocorrelation	264	..Excitation
218	....Cross-correlation	265	..Interpolation
219	..Linear prediction	266	..Specialized model
220	..Analysis by synthesis	267	..Time element
221	..Pattern matching vocoders	268	..Frequency element
222	...Vector quantization	269	..Transformation
223	...Excitation patterns	270	..Application
224	..Normalizing	270.1	..Speech assisted network
225	..Gain control	271	..Handicap aid
226	..Noise	272	..Novelty item
227	...Pretransmission	273	..Security system
228	...Post-transmission	274	..Warning/alarm system
229	..Adaptive bit allocation	275	..Speech controlled system
230	..Quantization	276	..Pattern display
231	.Recognition	277	..Translation
232	..Neural network	278	..Sound editing
233	..Detect speech in noise	500	<b>AUDIO SIGNAL BANDWIDTH COMPRESSION OR EXPANSION</b>
234	..Normalizing	501	.With content reduction encoding
235	..Speech to image	502	.Delay line
		503	<b>AUDIO SIGNAL TIME COMPRESSION OR EXPANSION (E.G., RUN LENGTH CODING)</b>
		504	.With content reduction encoding

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CLASS 704 DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS,  
LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION

FOREIGN ART COLLECTIONS

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